

**RESPONSE TO OFFICE ACTION**

ATTY. DOCKET : RM.CH5  
APPLICANT : Symington, et al.  
US SERIAL NO. : 10/539,923  
US ENTRY DATE : February 21, 2006  
PCT SERIAL NO. : PCT/US03/01943  
INT'L FILING DATE : December 16, 2003

Examiner : Benjamin J. Packard  
Art Unit : 1612  
Conf. No. : 90068399

**Annexure 1 - Claims Rewritten to Show Amendments**

Please amend the claims to read as follows:

1. (Currently Amended) A system for ~~formulation for a pharmacologically inert coating to serve as a temporary mechanical barrier on top of a temporary coating of a pharmacologically active substance applied to a surface of a tooth of a patient~~, the formulation system comprising, in combination:

a pharmacologically-active substance applied directly onto a surface of the tooth; and  
a coating applied over the pharmacologically-active substance, said coating being formed of;

an aqueous dispersion of a polymethylmethacrylate; and  
a plasticizer.

2. (Currently Amended) The system ~~formulation~~ of claim 1 wherein the aqueous dispersion of the polymethylmethacrylate is comprises an ammonio methacrylate copolymer, type B USP/NF.

3. (Currently Amended) The system ~~formulation~~ of claim 2 wherein the ammonio methacrylate copolymer is EUDRAGIT RS 30 D brand polymethylmethacrylate.

4. (Currently Amended) The system ~~formulation~~ of claim 1 wherein the plasticizer is a pharmaceutical grade plasticizer selected from the group consisting of triethyl citrate, dibutyl sebacate, dibutyl phthalate, and diethyl phthalate.

5. (Currently Amended) The system ~~formulation~~ of claim 4 wherein the plasticizer is triethyl citrate.

6. (Currently Amended) The system ~~formulation~~ of claim 4 comprising between 1% and 20% w/w plasticizer.

Amendments Code: ~~STRIKEOUT~~ or [[DOUBLE BRACKET]] means matter deleted;  
UNDERLINE means matter added

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7. (Currently Amended) The system formulation of claim 6 ~~having wherein said coating has~~ a viscosity of between 5 cP and 30 cP and a specific gravity of 1.054 g/ml plus or minus 0.050 g/ml.

8. (Currently Amended) The system formulation of claim 7 wherein the viscosity is between 5 cP and 20 cP.

9. (Withdrawn) A formulation comprising (w/w):  
20% to 35% ammonio methacrylate copolymer type B USP/NF;  
1% to 10% triethyl citrate; and  
60% to 70% water.

10. (Withdrawn) The formulation of claim 9 wherein the ammonio methacrylate copolymer is EUDRAGIT RS 30 D brand polymethylmethacrylate.

11. (Withdrawn) A formulation comprising (w/w) of:  
28% EUDRAGIT RS 30 D polymethylmethacrylate;  
6% triethyl citrate; and  
66% water.

12. (Withdrawn) A method for protecting pharmacologically-active substances applied in a temporary coating to a surface of a tooth comprising:

applying a pharmacologically inert barrier coating of a polymethylmethacrylate and a plasticizer on top of the temporary coating containing the pharmacologically-active substance to serve as a temporary mechanical barrier against the washings of saliva and abrasion caused by eating food.

13. (Withdrawn) The method of claim 12 wherein the pharmacologically-active substance(s) comprise one or more active agents of the type known to reduce caries when applied to the tooth.

Amendments Code: ~~STRIKEOUT~~ or [[DOUBLE BRACKET]] means matter deleted;  
UNDERLINE means matter added  
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14. (Withdrawn) The method of claim 13 wherein the pharmacologically-active substances are selected from the group consisting of chlorhexidine and fluoride.

15. (Withdrawn) The method of claim 12 wherein the polymethylmethacrylate is water-dispersed and the plasticizer is a pharmaceutical grade plasticizer selected from the group consisting of triethyl citrate, dibutyl sebacate, dibutyl phthalate, and diethyl phthalate.

16. (Withdrawn) The method of claim 12 wherein the polymethylmethacrylate is an ammonio methacrylate copolymer, type B USP/NF.

17. (Withdrawn) The method of claim 16 wherein the ammonio methacrylate copolymer is EUDRAGIT RS 30 D brand polymethylmethacrylate.

18. (Withdrawn) A method of preventing or reducing the incidence of caries in teeth, comprising the steps of:

- a. applying a liquid coating of pharmacologically-active substances of the type used to reduce caries to a tooth surface; and
- b. applying a pharmacologically inert barrier coating of a polymethylmethacrylate and a plasticizer on top of the coating containing the pharmacologically-active substance to serve as a temporary mechanical barrier against the washings of saliva and the abrasion from eating foods.